



Science



Science

Mile Post 1

Key Skills



National Curriculum		IPC learning Goals
Asking simple questions and recognizing that they can be answered in different ways	1.1	Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement
	1.2	Be able to pose simple scientific questions
Observing closely, using simple equipment	1.4	Be able, with help, to conduct simple investigations <ul style="list-style-type: none">Thinking about what will happenUsing, with help, simple scientific equipmentRecognizing when a test or comparison with one variable is fair
Performing simple tests		
Using their observations and ideas to suggest answers to questions		Be able, with help, to conduct simple investigations <ul style="list-style-type: none">Observing what happensComparing what happens with what they thought would happenOffering explanations for what happened, and why it happenedMaking simple comparisons, identifying similarities, differences and simple patterns
Gathering and recording data to help in answering questions	1.4	Be able, with help, to conduct simple investigations <ul style="list-style-type: none">Recording and communicating their observations-orally, in writing and through ICT
	1.3	Be able to identify ways of finding out about scientific issues
Identifying and classifying	1.4	Be able, with help, to conduct simple investigations <ul style="list-style-type: none">Making simple comparisons, identifying similarities, differences and simple patterns

Science

Mile Post 2

Key Skills



National Curriculum		IPC learning Goals
Asking relevant questions and using different types of scientific enquiries to answer them	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Suggesting ways of collecting evidence
Setting up simple practical enquiries, comparative and fair tests	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Suggesting ways of collecting evidencePreparing a simple investigation which is fair with one changing factor
Making systematic and careful observations and, where appropriate, accurate measurements using standard units, using a range of equipment, incl thermometers and data loggers	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Testing ideas using evidence from observation and measurementUsing simple scientific equipment
Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	2.2	Be able to gather information from simple texts
Recording findings using simple scientific language, drawings, labeled diagrams, keys, bar charts and tables	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Recording and communicating their observations and findings in a variety of ways
Report on findings from enquiries, incl oral and written explanations, displays or presentations of results and conclusions	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Explaining their observations and findings
Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Predicting the outcomes of investigationsUsing evidence to draw conclusions
Identifying differences, similarities or changes related to simple scientific ideas and processes	2.1	Be able to carry out simple investigations <ul style="list-style-type: none">Linking the evidence to broader scientific knowledge and understanding

Science

Mile Post 3

Key Skills



National Curriculum		IPC learning Goals
Planning different types of scientific enquiries to answer questions, incl recognizing and controlling variables where necessary	3.2	Be able to conduct scientific investigations <ul style="list-style-type: none"> • Posing scientific questions • Choosing an appropriate way to investigate a scientific issue
Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	3.2	Be able to conduct scientific investigations <ul style="list-style-type: none"> • Making systematic and accurate measurements from their observations • Repeating investigations, observations and measurements to check their accuracy and validity
Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	3.2	Be able to conduct scientific investigations <ul style="list-style-type: none"> • Recording and communicating their findings accurately using the most appropriate medium and the appropriate scientific vocab and conventions
Using test results to make predictions to set up further comparative and fair tests	3.2	Be able to conduct scientific investigations <ul style="list-style-type: none"> • Using their scientific knowledge and understanding to predict the outcome • Relating the outcome to their original prediction • Repeating investigations, observations and measurements to check their accuracy and validity
Reporting and presenting findings from enquiries, incl conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	3.2	Be able to carry out simple investigations <ul style="list-style-type: none"> • Explaining and justifying their predictions, investigations, findings and conclusions • Identifying patterns in results • Using scientific language to explain any differences found in the results of investigations • Suggesting ways in which their investigations and working methods could be improved
Identifying scientific evidence that has been used to support or refute ideas or arguments	3.2	Be able to carry out simple investigations <ul style="list-style-type: none"> • Relating their own investigations to wider scientific ideas • Drawing conclusions based on evidence

	3.3	Be able to gather evidence from a variety of sources
	3.4	Be able to discriminate between evidence and opinion
	3.5	Understand the importance of using evidence to test scientific ideas